

Date: Wednesday, 11/03/2009 12:58:54 PM
 User: Julie Dawson

Process Sheet

| | |
|--|--|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : STA 84 BRACKET |
| Job Number : 46436 | |
| Estimate Number : 11035 | |
| P.O. Number : | Part Number : D28032 |
| This Issue : 11/03/2009 S.O. No. : | Drawing Number : D2803 REV B |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : / / Type : MACHINED PARTS | Drawing Revision : B |
| Previous Run : 44478 | Material : |
| Written By : | Due Date : 23/03/2009 Qty: 6 Um: Each |
| Checked & Approved By : <u>JUD 09.03.11</u> | |
| Comment : Est. A 00.11.06 New Issue EC | |
| Est Rev:B Blanks now cut on Waterjet 06-06-14 JLM | |
| Est Rev:C Removed Tumbling 08-09-10 JLM Verified By:EC | |

Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---|-----------------------|--|
| 1.0 | M6061T6B0500X10000 | 6061-T6 Bar .500 x 10.00 |
| | | |
| Comment: Qty.: 2.0125 f(s)/Unit Total : 12.0752 f(s) 6061-T6 Bar .50" x 10.0" Material: 6061-T6 bar 10.00" x 0.50" Batch: <u>109288</u> <i>11382 B949</i> <i>B944</i> <i>09.04.03</i> (6) | | |
| 2.0 | WATER JET | FLOW WATER JET |
| | | |
| Comment: FLOW WATER JET 1-Cut as per Template DT8533 Dwg Rev: <u>B</u> <i>B9-4-4</i> Prog Rev: <u>B</u> <i>B9-4-9</i> 2-Deburr if necessary | | |
| 3.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
| | | |
| Comment: HAAS CNC VERTICAL MACHINING #1 Machine as per folio FA102 <i>SR 09/04/09</i> (3) <i>PTO</i> | | |
| 4.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
| | | |
| Comment: INSPECT PARTS AS THEY COME OFF MACHINE <i>SR 09/04/09</i> (3) | | |
| 5.0 | QC8 | SECOND CHECK |
| | | |
| Comment: SECOND CHECK <i>09/04/15</i> (3) | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: D2803-2 PAR #: N/A Fault Category: Prod / Machined Parts NCR: (Yes) No DQA: D Date: 09/04/15
 Resolution: SCAP Disposition: SCAP QA: N/C Closed: D Date: 09/04/16

| NCR: 46436 | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------------|------|--|--------------------------------|--|-----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 09/04/09 | 3.0 | One One part the hole of .191 $\pm .005$ get out at .206" ad R.C. operator put wrong drill | DSIMUZ | Set-up & follow instructions are clear. Scrap no replace. Ensure to double check tools being inserted. | 8/8 09/04/09 | 09/04/15 | DSIMUZ | 09-04-15 |
| | | One part the depth of .250 $\pm .005$ is too deep .260. and hole of .507 $\pm .000$ is too big .508. R.C. program error R.C. operator error | DSIMUZ | The roughing tool was lowered by mistake, instead of raising it. The finishing was supposed to be lowered. 0.125" edge dim is too thin on 2 parts and are scrap, chs tool, no replace. R.C. operator error. Qty 2 | 8/8 09/04/09 | 09/04/15 | DSIMUZ | 09-04-15 |
| | | One part had multiple cuts are similar then the other one. Blank missing material on one side. R.C. operator error | DSIMUZ | offer wrong side | 8/8 09/04/09 | 09/04/15 | DSIMUZ | 09-04-15 |

NOTE: Date & initial all entries

Date: Wednesday, 11/03/2009 12:58:54 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STA 84 BRACKET

Job Number: 46436

Part Number: D28032

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

gll

09-04-15

N3

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

ST 148

JA

09/04/15

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/04/15

JA

Job Completion



mf 09-04-15

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| | | |
|------------------------------|---------------|-----------------------------|
| DART AEROSPACE LTD | | Work Order: 46436 |
| Description: Bracket | | Part Number: D2803-2 |
| Inspection Dwg: D2803 | Rev: B | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

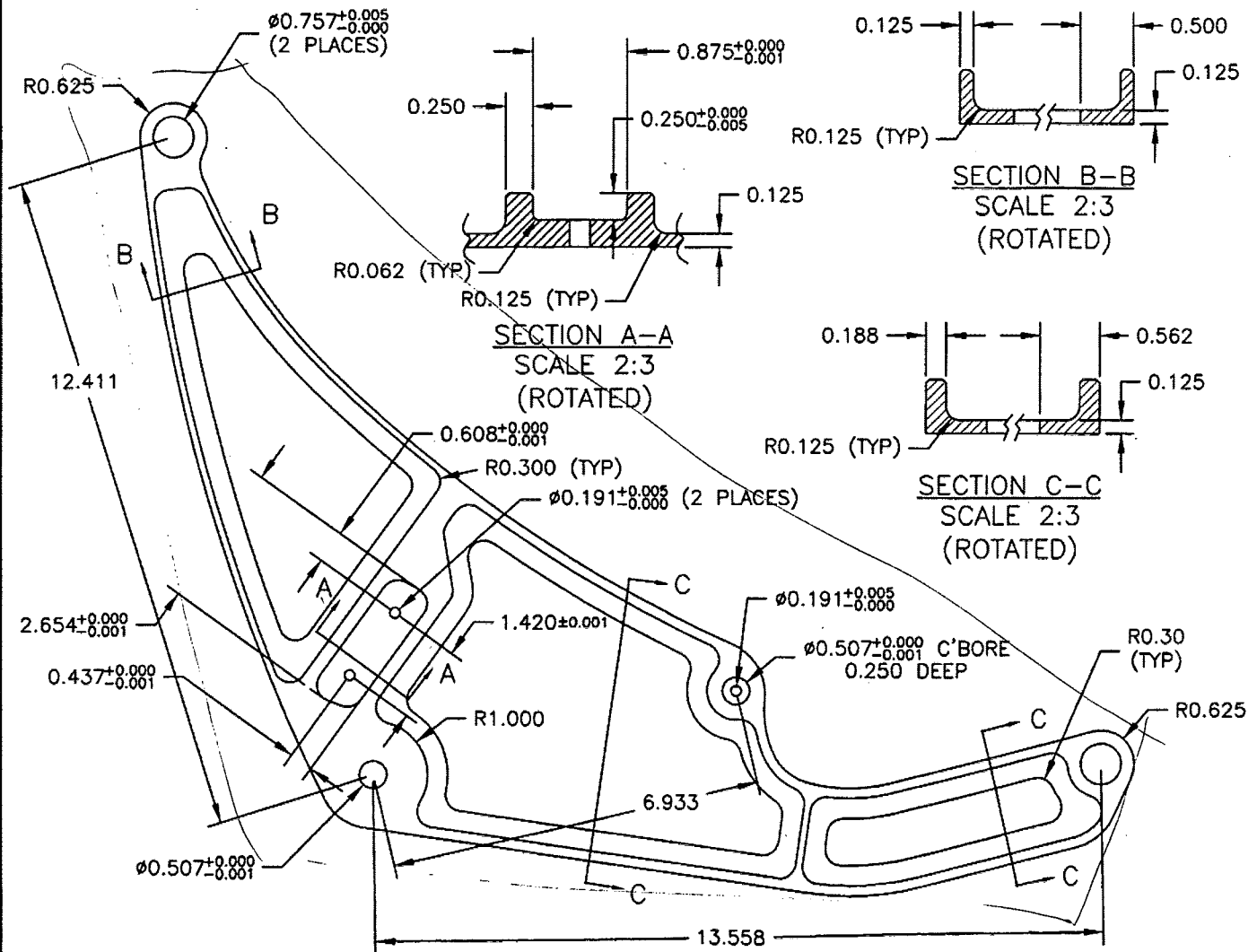
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.757 | +0.005/-0.000 | .759 | ✓ | | | |
| 1.420 | +/-0.001 | 1.420 | ✓ | | | |
| Ø0.191 | +0.005/-0.000 | .194 | ✓ | | | |
| Ø0.507 | +0.000/-0.001 | .506 | ✓ | | | |
| Ø0.507 x 0.250 | +0.000/-0.001 | .506 x .250 | ✓ | | | |
| 12.411 | +/-0.010 | 12.411 | ✓ | | | |
| 6.933 | +/-0.010 | 6.933 | ✓ | | | |
| 0.250 | +/-0.010 | .252 | ✓ | | | |
| 0.875 | +0.000/-0.001 | .875 | ✓ | | | |
| 0.250 | +0.000/-0.005 | .250 | ✓ | | | |
| 0.125 | +/-0.010 | .126 | ✓ | | | |
| 0.125 | +/-0.010 | .125 | ✓ | | | |
| 0.500 | +/-0.010 | .502 | ✓ | | | |
| 0.125 | +/-0.010 | .125 | ✓ | | | |
| 0.188 | +/-0.010 | .188 | ✓ | | | |
| 0.562 | +/-0.010 | .564 | ✓ | | | |
| 0.125 | +/-0.010 | .125 | ✓ | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | |
|---------------------------------|--------------------------------|--------------------------------|
| Measured by: [Signature] | Audited by: [Signature] | Prototype Approval: N/A |
| Date: 09/04/05 | Date: 09/04/05 | Date: N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---------------------------------------|------------|-------------|
| A | 05.04.25 | New Issue | KJ/JLM | |
| B | 06.12.07 | 13.558 dimension removed | KJ/JLM | |
| C | 08.01.16 | Tolerance revised for 0.875 dimension | KJ/EC/DD | [Signature] |

DART

| | | | | | |
|---------|--------------------|-------------------------|--------------------|-----------------------------|--------------|
| DESIGN | CP | DRAWN BY | CP | DART AEROSPACE LTD | |
| | | | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | <i>[Signature]</i> | APPROVED | <i>[Signature]</i> | DRAWING NO. | REV. B |
| | | | | D2803 | SHEET 1 OF 2 |
| DATE | 04.11.22 | TITLE | STA 84 BRACKET | SCALE | 1:3 |
| A | 00.11.07 | NEW ISSUE | | | |
| B | 04.11.22 | ADD CUTOUTS & -043/-044 | | | |

RELEASED05.03 11 *[Signature]***D2803-1 BRACKET (SHOWN). D2803-2 BRACKET (OPPOSITE)**

- 1) MACHINE PER DRAWING FILE "D2803.SLDPRT"
- 2) MATERIAL: 6061-T6 (QQ-A-200/8) OR (QQ-A-250/11) 0.500 THICK
- 3) DEBURR TO LEAVE R0.030 - 0.063 ON ALL EDGES
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

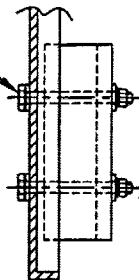
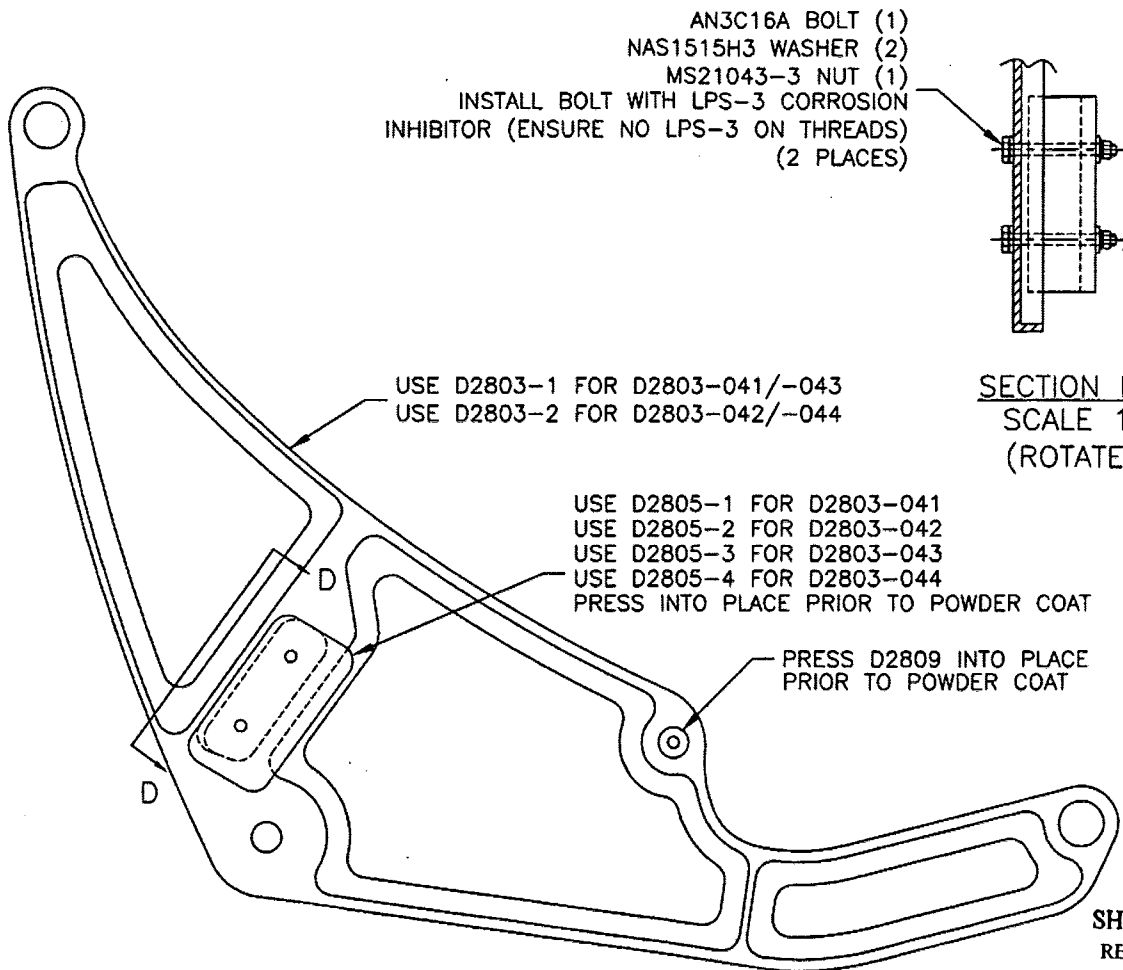
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| | | | |
|-------------------------------|--------------------------------|---|------------------------|
| DESIGN CP | DRAWN BY CP | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D2803 | REV. B SHEET 2 OF 2 |
| DATE 04.11.22 | TITLE STA 84 BRACKET | | SCALE 1:3 |



SECTION D-D
SCALE 1:3
(ROTATED)

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WORK ORDER

05-03-11 NO. 46436

D2803-041/-043 BRACKET ASS'Y (SHOWN).
D2803-042/-044 BRACKET ASS'Y (OPPOSITE)

6) FINISH: POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6)
OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3

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